7302 Memory System

DESCRIPTION

The 7302 Memory System is a modular, high-capacity memory package designed for mass storage of data in a variety of random-access computer applications. These units provide a completely self-contained rapid-access memory subsystem for use by system builder, computer manufacturer, and data processing user. Each 7302 includes all-silicon electronic circuitry for reading, writing, track selection, and generation of timing signals. All input and output signals interface with the computer system at integrated circuit logic levels.

The basic 7302 is designed for installation in a standard 19-inch cabinet.

RELIABILITY

The memory device is shock-mounted within a hermetically sealed enclosure which is filled with dry, inert gas. This controlled environment completely protects the unit from dust, dirt, moisture, or any other contaminating elements, and provides the hydrodynamic gas bearing for the flying heads.

HEAD-PER-TRACK ORGANIZATION

The unique non-contact head-per-track design of the Series 7302 provides for fast access—8.5 ms average access time—high device reliability, and environmental stability.

The combination read/write heads are organized in groups of 64. Each group services one disc surface. The heads are actuated into flying position pneumatically and are mechanically restrained away from the disc surface, in the non-operating condition. The heads never touch the recording surface and are basically insensitive to shock and vibration. No head adjustment or calibration is required. The head blocks are completely interchangeable.

MODULAR DESIGN

The modular system of multiple discs and heads allows the capacity of the 7302 to be tailored to individual requirements. By specifying the number of discs and heads for your application, you buy only the initial capacity and expansion capability that you need. Additional heads are easily added in the field.

APPLICATIONS

The 7302 systems are available for a variety of data organizations and interfaces. Controller logic units, the interface between the memory device and computer, can be provided per customer request. DDC provides complete technical design and applications assistance to meet your requirements.

DIGITAL DEVELOPMENT CORPORATION

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SPECIFICATIONS

Discs 4 max. ata Tracks 512 max.

Data Tracks 512 max.

Max. Rated Capacity 23.04 x 106

Max. Rated Capacity 23.04 (millions of bits)

 $\begin{array}{ll} \text{Bits/Disc} & 5.76 \times 10^6 \text{ max.} \\ \text{Bits/Surface} & 2.88 \times 10^6 \text{ max.} \end{array}$

Bits/Track 45,000 max. 33,000 std.

Tracks/Surface 64

Bit Transfer Rate 2.7 MHz max.

Speed 3600 RPM standard

1800 RPM optional

Average Access Time 8.5

Timing Signals 4 standard (plus spares)

System Design Life 10 years

115 10 years

Motor Power 115 VAC, 1∅, 50/60 Hz

Ambient Operating Temperature 0° to 105°F
Ambient Operating Humidity 5% to 95%

Standard Power Supply Voltages +18V, -12V

Standard I.C. Logic Levels $$ OV and +5V

Over-all Height (in.) 21.0 max.

Max. Weight (lb.) 190

Max. Power Requirements 125 watts

